

II. AMENDMENTS TO THE CLAIMS

Claims 1-12. (Canceled)

Claim 13. (Original) A method for lithography using a photo mask, in which the photo mask utilizes a glass optical member, said method comprising:

providing a porous silica glass body for the glass optical member;
heating the porous silica glass body in an atmosphere containing hydrogen; and
sintering the porous silica glass body in an atmosphere containing a fluorine compound.

Claim 14. (Currently Amended) The method according to claim 13, further comprising ~~comprises~~ providing a light source of the lithography having a wavelength of 400 nm or less.

Claim 15. (Currently Amended) The method according to claim 14, wherein the light source includes an F₂ excimer laser ~~a light source~~.

Claim 16. (Original) A method for lithography using a photo mask, in which the photo mask utilizes a glass optical member, said method comprising:

providing a porous silica glass body for the glass optical member;
heating the porous silica glass body in an atmosphere containing oxygen; and
sintering the porous silica glass body in an atmosphere containing a fluorine compound.

Claim 17. (Currently Amended) The method according to claim 16, further comprising ~~comprises~~ providing a light source of the lithography having a wavelength of 400 nm or less.

Claim 18. (Currently Amended) The method according to claim 17, wherein the light source includes an F₂ excimer laser ~~a light source~~.